



Security System Integration

December 12, 2012

University of Kentucky
Purchasing Division
322 Peterson Service Building
Lexington, KY 40506

Criteria 2 Services Defined

a.

- VMS/SMS systems
 - Next Level Security Systems will provide the single unified solution to Video management and Security Access Control Management as described in detail in this document.
- Interior Cameras
 - Interior Cameras will be provided by Axis, the camera mounting and wiring infrastructure will be done by Dixon Electric, Inc., Head end termination by ADS, with NLSS commissioning and programming.
- Exterior Cameras
 - Exterior Cameras to be mounted on Talk-A-Phone Scansions will be Axis M3007 5 megapixel Dual 180/360 degree view, these cameras will be mounted in a Videolarm FDP75 series 7" pendant dome.
- Interior Notification
 - Interior notification will be an extension on the Informacast and Rave systems already in place, our scope will include the addition of the specified number of Valcom Informacast compatible speakers in vandal enclosures.
- Exterior Notification
 - We propose to us the specified Talk-A-Phone WEBS-MT/R OP4 with a Dual 180/360 degree camera. These devises will be notification will be an extension on the Informacast and Rave systems already in place.



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- Card Access

Our proposed access control (SMS) system will be controlled and administered as part of the Next Level Security Systems Gateway providing one common platform and control interface for all campus systems. NLSS interfaces with Mercury door controllers that are the industry standard in access control panels. Our solution also uses the HID Duo Prox cards with proximity and mag stripe technologies as well as the ability to print bar codes, ID and photo information to each card. Door locking hardware will be provided and professionally installed by Atlas Companies. System programming and commissioning will be provided by ADS/NLSS. Long range HID card readers are included on 22ea. ADA equipped doors.

Legacy Systems

Our current proposal includes the upgrade of the C Cure system at the UK Med Center with Mercury hardware to allow full command and control of all systems from a single web based NLSS interface. All investment in door locking and life safety equipment will be retained.

Offerors Exceptions

Section 7.1 VMS/SMS

NONE

Section 7.2 ID Card

The specification call for an iClass card...our best recommendation is to use a much less expensive Prox II HID dual technology card which will save cost now and in the future. In the not too distant future we believe the proximity technology will be



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replaced by NFC (Near Field Communications) technology which will remove the need for ID cards altogether. We believe that investing in a more expensive card that serves no immediate purpose and will shortly be replaced by new technology would be a waste of resources.

Section 7.3 Interior Cameras

NONE

Section 7.4 Exterior Cameras

NONE

Section 7.5 Access Control (Door Hardware)

NONE

Section 7.6 Interior Building Notification

NONE

Section 7.7 Exterior Building Notification

NONE

Section 7.8 Legacy System

NONE

- b. The NLSS system does NOT require the use of a PSIM. PSIM's are very costly and high in management overhead. Our goal is to develop any necessary integration in partnership with the other system suppliers such that the NLSS UI (user interface) is the primary security operation center (SOC) Operator interface for database programming, User interface and response.

We see a small amount of integration to CBORD with the assistance of the University IT department.

CBORD will need to add a Prox # field to their db, if it isn't there today. During the initial data entry and process to make the ID badge, the access card's prox # will be



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captured and sent in real-time to a db/view table, with the associated user ID (primary identifier), such as the student ID and photo. NLSS will pull that data into our database to build the access control db and to provision the appropriate access level (see item 1 below).

We see Integration to the Emergency Notification System as event based. We plan to provide “Integration” as follows:

Video Events will send triggers to the Informacast system and Informacast will function as it is independently programmed

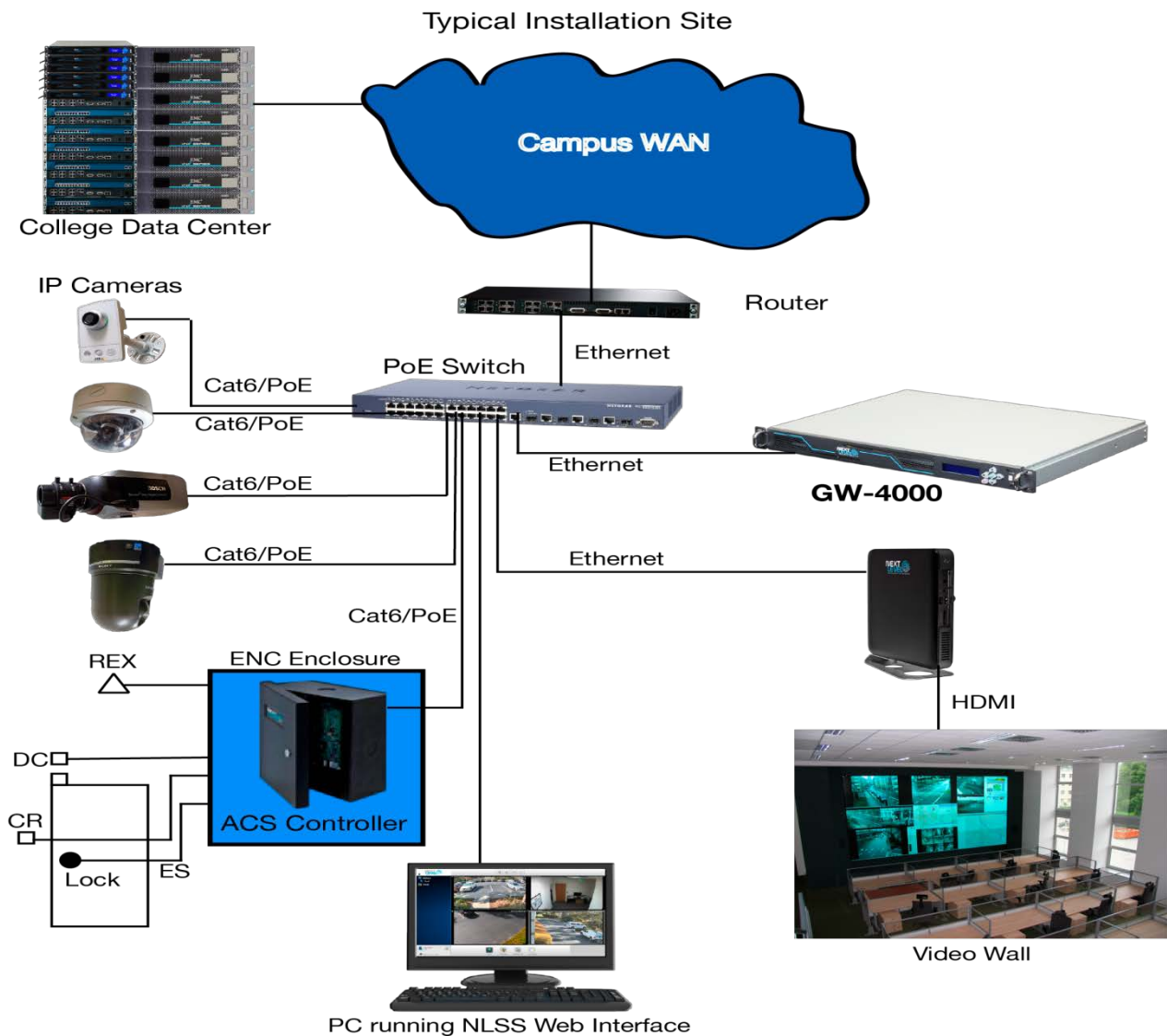
. Certain Informacast Events will send triggers to the NLSS Video system to bring up presets.

- c. The NLSS network architecture is distributed in nature. The plan is to provide an NLSS Gateway per building, which will house the security db. Replication takes place via our NLSS Cloud Services and event transactions are stored on the Gateways, as well as on the remote servers’.
- d. The NLSS storage solution will be two-fold. Each Gateway will be capable of retaining 8 TB of localized storage. In partnership with EMC, NLSS will work with the UKY IT department to design a storage architecture to meet the University’s needs and policy for retention.



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- e. The NLSS network solution architecture (hi-level) is as follows per building





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- f. The NLSS solution provides all of the built-in analytics in accordance with 7.15.3 a, b and c of the specification.
- g. Detail solution of real time integration with each existing University of Kentucky database: SAP, CBORD, CCure-9000

SAP

The NLSS solution will utilize LDAP to connect with the University's SAP database. It is assumed that SAP is the single source of record.

A primary data conduit will be created for certain relevant information to flow from SAP into NLSS. See DIAGRAM 1 below in the section called Data Flow. Those relevant information fields will be defined later.

CBORD

We plan to leave CBORD in place as the primary source for student ID issuance.

Once a proximity card # is entered into CBORD and the access card is issued, an automated process will trigger a real time push of the proximity # to a table (created by UKY-IT) with the student's ID as the primary key.

NLSS will import the proximity card # from that table into its security database. At this time, the Operator will enter an access level manually or create an automated access level based on a business rule

The security database will remain separate from CBORD (more secure) and it will be managed by Security.



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Ccure

Our understanding is that CCure is currently only used at the Medical facility. CCure is a proprietary system that offers no API integration capability.

Our business plan is to perform a conversion, which is significantly less painful in both cost and management than a PSIM approach.

A conversion consists of replacing the iSTAR controllers with Mercury Security controllers.

We would not have to replace the existing card readers.

- We would not have to replace the existing Wiegand cable to the existing door control modules
- We would not have to replace the RS232 cable running to the existing iSTAR controllers.
- We would not have to replace the lock cabling or hardware, if currently operational.
- We would not have to replace the controller or lock power supplies, if currently operational.
- The cardholder db would need to be exported, along with the configuration of access levels.
- The cardholder db would be imported into the NLSS system.
- The technical door data and access levels would be manually entered into the NLSS system.



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- h.** We see Integration to the Emergency Notification System as event based. The “Integration” plan is as follows

Video Events will send triggers to the Informacast system and Informacast will function as it is independently programmed.

Certain Informacast Events will need to send triggers to the NLSS Video System to bring up presets.

Certain Events can trigger canned emergency messages that can be played through the NLSS Decoder. The Decoder can play video files over its HDMI connection to display monitors throughout the campus. Emergency messages can also be pushed manually to any HD monitors connected over the campus LAN.

- i.** The NLSS solution plan will not interrupt the existing badge production process.
- Processes and procedures to enable student ID’s done today with CBORD, will continue as it’s done today.
- Rebadging 40,000 cardholders is a project that requires a fair amount of coordination. This can be done in-house or outsourced. Our recommendation would be to use HID’s Identity On Demand program to manufacture the new ID access cards. It is assumed that the primary field will be the student ID and that this is not reused.
- The University would provide the artwork for the ID badge.
 - The University would provide a data export of all cardholders, with names, ID’s, photos, and encoded mag stripe information.
 - The HID card proposed for the ID/access card is a Prox II Dual Technology card with imbedded proximity technology and a mag stripe. The card shall have a pre-punched slot and have factory embossed consecutive numbers that represent the internal prox #. Horizontal or vertical orientation of the card will be specified later. The University will not require a smart chip at this time."



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- HID will pre-test all new access cards.
 - HID will provide an importable cardholder file with names, ID's, photos, encoded mag stripe information, and the new prox card #.
 - NLSS will import the cardholder db and photo.
 - The System's Integrator will program the balance of the NLSS db.
 - CBORD will encode the mag stripe
 - The University will distribute all new ID access cards, collecting the old card (1 for 1), in advance of a building system conversion.
 - The old card or new card will work on the existing mag stripe readers and over time, prox readers will be installed.
- j. For Access Control, NLSS is proposing to use Mercury Security controllers tied to each building's distributed NLSS Gateway. These controllers support 240,000 cardholders with 32 access levels per cardholder record. They also buffer 50,000 transactions in the event of a communication loss. A single Mercury controller can control up to 64 doors, although NLSS recommends limiting your design to a 32 door capacity for better risk management.
- k. The subcontractor for this work will be Dixon Electric Co.
- l. DSI will provide a full time NLSS certified engineer for the first year of deployment and testing, sufficient system stabilization is usually obtained within the first year of use. The remainder of the warranty and preventative maintenance will be performed by DSI employees and a minimum of one replacement part for each mission critical part, ie. NLSS Gateway, Mercury control panel, each camera type, etc. There will be a minimum of 1 preventative maintenance service visits per month, not including emergency or normal service calls.
- m. University of Kentucky-IT will need to support NLSS in the following:

BADGING

- see item i above

DATA FLOW



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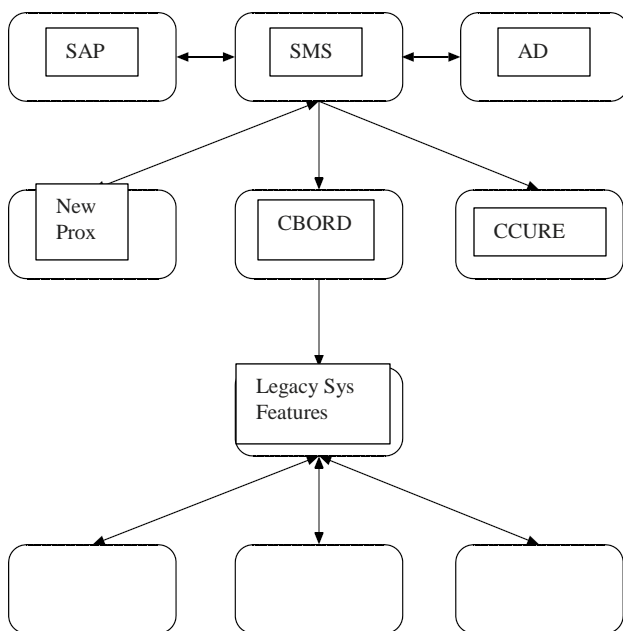
- NLSS proposes to not disrupt the University's existing ID badge production process. This includes leaving CBORD with the responsibility for making the badges. To do this, we need UKY-IT to create a db/view table as described below and we need CBORD to export the prox # to this table upon badge production.

Advantages:

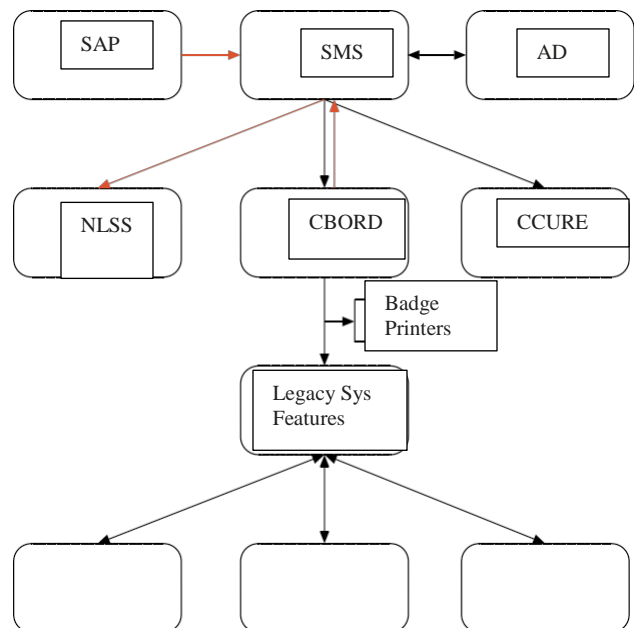
- We create NO disruption to existing processes
 - It is efficient in terms of data flow and cost effectiveness.
 - It ensures that security functionality is NOT dependent on CBORD.
- The following depicts a data flow proposal that we would like to discuss and have considered:

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Current ACS Integration Flow

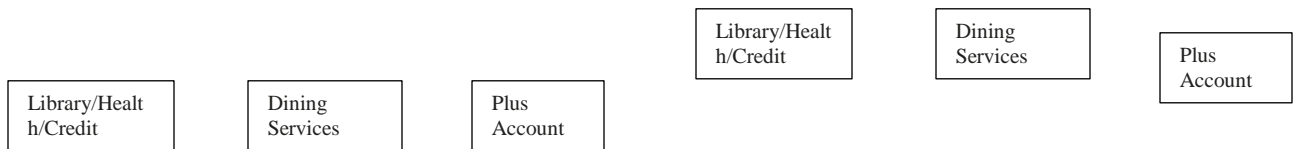


Proposed ACS integration Flow





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Database Export

- NLSS will require an export of the cardholder db from each of existing access control systems. The data fields required will be provided later.
- NLSS will require an export of the technical db configuration from each of existing access control systems, including how access levels are mapped to the doors and schedules. The data fields required will be provided later.
- n. Dallmann Systems, Inc. in association with NextLevel Security Systems will provide user, administrative, and technical training via a formal class room setting on campus. The training will be divided into 6, 4 hour blocks over 3 days, the university will determine the attendees and their level of training. This training will include hands-on training on system procedures.

Web Portal/Help Desk Support

DSI will develop and deploy a web portal on the internet that will contain all system Technical manuals, how to videos and training materials, this will be updated to contain the latest revisions as they become available.



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o. Warranty Service

Dallmann Systems, Inc. will provide warranty service as per RFP specification, with 5 year maintenance on the installed equipment, and 5 year or the extended manufactures warranty if greater that 1year. University will have the option of initiating a service call via one toll free phone number or creating a service ticket via web entry. Response will be 1 hour phone contact, 4 hour onsite for emergencies, next business day for non-emergencies.

DSI will provide the University with a cloud based service entry system that will allow University to enter service request and it be transmitted to the proper technical response personnel. This system will allow service and warranty tracking.

One-on-one support through any channel

Zendesk takes customer communication from anywhere—your website, email, phone, Twitter, Facebook, and chat—and turns it into a ticket. Your support team sees everything in one place; your customer uses the channel they prefer.



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Infrastructure Warranty:

Dixon Electric, Inc for the work on the above project, does hereby warrant that for a period of five (5) years from the date of substantial completion, the above work that it will remain free from all defects in workmanship and material, and that it will comply with all the specific requirements of the Specifications and other Contract Documents governing the work.

It is understood and agreed that in the event of defects and the necessity of making repairs, the Owner will immediately notify Dixon Electric, Inc in writing of its conditions and shall give the contractor reasonable time in which to make said repairs.

If any person, firm, or corporation other than the above listed contractor has, since the completion of the above work, performed or attempted to perform any repairs to the property then this warranty



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could become null and void. This warranty does not cover any repairs made by anyone other than the above contractor or one of its authorized representatives.

The contractor shall not be under any responsibility or liability whatsoever to make repairs occasioned by injury to said property caused wholly or in part by windstorm, tornado, lightning, hail or other casualty, or by reasons of negligence by any party not directly associated with the contractor